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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,948	12/31/2003	Stephen John Carlson	M01A226	8577

7590 06/15/2006

The BOC Group, Inc.
Legal Services-Intellectual Property
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EXAMINER

SORKIN, DAVID L

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/749,948	Applicant(s) CARLSON ET AL.	
	Examiner David L. Sorkin	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 7-14, 18 and 20-22 is/are allowed.
 6) ☒ Claim(s) 1-6, 15-17 and 19 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rushmore (US 1,647,473). Regarding claim 1, Rushmore ('473) disclose an apparatus comprising a first vessel (11); a second vessel (10); an aspirator (20) that produces reduced pressure in the second vessel as a first fluid flows through the aspirator to the first vessel; a fluid inlet (13 or 16) in the second vessel that allows a second fluid to enter the second vessel; and a fluid conduit (18) connecting the first vessel and the second vessel. Rushmore ('473) recognizes the importance of determining the amount of material in the vessels on page 1, lines 88-89, which would have suggested level sensors for the vessels to one of ordinary skill in the art. Regarding claim 2, a first valve (19) controls flow through the conduit. Regarding claim 3, a "second" (note: claim 3 only requires one valve) valve (15) controls flow of the second fluid. Regarding claim 4, as seen in the drawing, knobs to control the valves are disclosed. Regarding claims 5, each vessel has an exhaust conduit and valve (41). Regarding claim 6, each vessel has a gas supply conduit and valve (15, 23).

3. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rushmore ('473) in view of Parker ('621). Rushmore ('473) discloses an apparatus

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comprising a first vessel (11); a second vessel (10); an aspirator (20) capable of producing reduced pressure in the second vessel as a first liquid flows through the aspirator to the first vessel; a fluid inlet (16) in the second vessel; a first valve (19) controlling fluid flow in the fluid conduit and a second valve (15) capable of controlling flow through the fluid inlet. As seen in the drawings, control knobs for the valves are disclosed. A cabinet is not disclosed. Parker ('621) teaches placing vessels in a cabinet (10,11,12) for the purpose of temperature control. It would have been obvious to one of ordinary skill in the art to have places the vessels and aspirator of Rushmore ('473) in a cabinet as taught by Parker ('621) to achieve the benefit of temperature control (see Parker, page 1, lines 1-55).

4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rushmore ('473) as applied to claim 1 above, in view of Lins (US 2004/0004903). Rushmore ('903). Lins ('903) teaches a sensor (32) for determine concentration. It would have been obvious to one of ordinary skill in the art to have provide the apparatus of Rushmore ('473) with the sensor taught by Lins ('903) to assure the quality of the mixed product (see [0026] of Lins '903).

Allowable Subject Matter

5. Claims 7-14, 18 and 20-22 are allowed.

Response to Arguments

6. The claims as currently amended are not rejected under section 112.

7. Contrary to applicant's remarks, Rushmore ('473) expressly states "causing the injector 20 to draw solution from the storage tank 10 and discharge it into the delivery tank 11".

8. Rushmore ('473) makes clear the desirability to determine liquid level on page 1, lines 86-89.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 571-272-1148. The examiner can normally be reached on 9:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David L. Sorkin
Primary Examiner
Art Unit 1723

DLS